

### REMARKS

By the *Office Action* of 08 April 2005, the Examiner rejects Claims 41-44. On 28 June 2005, the Examiner and Applicant's attorney held a telephone interview. The Examiner indicates in the *Interview Summary* of 01 July 2005 that an agreement on the Claims was not reached. Applicant thanks the Examiner for the interview.

By the present *Response and Amendment*, Claims 41-42 and 44-53 are pending.

No new matter is introduced by the present *Response and Amendment*. It is respectfully submitted that the present Application is in condition for allowance.

#### 1. Claims Pending Before Entrance Of This *Response And Amendment*

Claims 41-44, among others, were originally presented in the 10 June 2004 RCE. Claims 41-44 were noted as allowable in a 10 September 2004 *Office Action*. In response, in a 21 September 2004 *Response and Amendment*, Applicant limited the application to only Claims 41-44. In an *Examiner's Amendment* accompanying the 14 December 2004 *Notice of Allowance*, Claim 41 was amended, Claim 43 canceled, and Claims 42 and 44 unchanged.

Although the present *Office Action* indicates Claims 41-44 are pending, Applicant respectfully believes Claims 41-42 and 44 are pending, and assumes such with this *Response and Amendment*. If the Examiner believes that Claims 41-44 were not amended as indicated in the *Notice of Allowance*, Applicant respectfully requests the opportunity to resubmit this *Response and Amendment*, assuming Claims 41-44 are pending.

#### 2. The Calibration Process

Conventionally, the calibration process of a whiteboard system includes three steps. First, a calibration image is projected onto the whiteboard. The calibration image can be a dialog box instructing the user to touch the screen at one or more calibration points. These calibration points may be ascertained by requesting the user touch the surface of the electronic whiteboard at the intersection of two lines which are projected onto the electronic whiteboard surface, by requesting the user touch the surface of the electronic whiteboard in four points in each corner, or any other manner which can establish the user touching the surface of the electronic whiteboard at one or more calibration points. *See, Specification, Page 5, Lines 11-18.*

Second, the system detects the touch(es) of the user, wherein the user has approached the board, and touched where instructed from the first step of the calibration process. Third, the

system calculates a relationship between the touched point(s) on the whiteboard corresponding to the projected calibration image and position(s) on the display device.

In a preferred embodiment of the present invention, once the touch location sensitive surface of the electronic whiteboard detects that the user has touched the one or more calibration points (the second calibration step), these locations are used for relating locations on the electronic whiteboard display to positions on the display of the computer (the third calibration step), thus allowing the computer to calculate generally the relationship between a touch on the whiteboard and a position on the display. *See, Specification, Page 5, Lines 19-24.*

The present invention is concerned with the *initiation* of this calibration sequence. That is to say, the calibration process, which conventionally begins with projecting a calibration image onto the whiteboard, begins with a signal to the system to initiate calibration, wherein this signaling occurs distant the computer. In prior art systems, the signal to initiate calibration occurs at the computer.

The calibration of the whiteboard system of the present invention begins when the system is signaled to display a calibration image on the whiteboard, wherein the user approaches the board, and touches the board at calibration points. The present invention deals with *initiating the calibration* of the system, that is, the step just prior to displaying the calibration points on the board.

### 3. The 1998 SMART Board Product Manual

Claims 41-42 and 44 are rejected under 35 USC §102(b) as anticipated by the 1998 SMART board product manual. Applicant respectfully traverses this ground of rejection.

In prior art systems like the SMART systems, the step of initiating the calibration occurred at the computer.

Electronic whiteboards, however, do have their disadvantages. Usually, they are complicated to use. This disadvantage prevents novice users from enjoying the benefits such technology offers for meetings and presentations. One of the complications present in using electronic whiteboards is the calibration of the whiteboard. Calibration is necessary so that the computer can properly relate positions on the whiteboard to locations on the computer display device, and thus, properly interpret touch inputs detected on the surface of the electronic whiteboard. Typically, calibrating the electronic whiteboard involves the user operating at the computer, rather than at the electronic whiteboard, to start a calibration. Then, after the user initiates the initial calibration at the computer, the user must perform a calibration of the

electronic whiteboard. This complicated procedure, usually calling for the assistance of another person, scares novice technology users away from electronic whiteboard technology, and overcomplicates. *Specification, Page 2, Lines 5-17.*

It is clear from the above that the "start" of the calibration process, or the "initiation" of the calibration process, conventionally occurs at the computer, at which time the user must then go from the computer, to the whiteboard, or an assistant is used.

As used in the present application, the step of initiating or starting calibration means that the next step of the system is the calibration process, beginning with the display of calibration points on the whiteboard.

Once the user selects the calibrate icon on the physical menu bar on the surface of the electronic whiteboard, a dialog box is displayed on the surface of the electronic whiteboard instructing the user to touch the surface of the electronic whiteboard at one or more calibration points. These instructions may request that the user touch the point at which the two lines intersect, that the user touch points located in the four corners of the electronic whiteboard surface, or any other manner which can establish the user touching the surface of the electronic whiteboard at a calibration point. *Specification, Page 6, Lines 15-27.*

It is respectfully submitted that there is no reasonable way to read the 1998 SMART board product manual, and find that it anticipates the Claims as pending. The SMART manual discloses, teaches and suggests only one way to initiate the calibration process, that being at the computer. It is exactly the kind of prior art system that the present invention improves upon.

The SMART manual includes a chapter on "Configuring and Orienting the SMART Board" beginning at page 25. The Examiner alleges that the steps of orienting the SMART board found at pages 27-28 of the manual is analogous to the steps of initiating calibration of the present application. It is respectfully submitted that step 4 on page 28, and only step 4, is the initiation of calibration for the SMART board, and as step 4 occurs at the computer, it cannot anticipate the present claims.

The manual discloses a five-step "orientation" process, but only step 4 on page 28 can be equated with the present invention's "step of initiating calibration", and this step 4 of the SMART orientation occurs *at the computer*.

The first step of orientation disclosed in the SMART manual can be one of three substeps, disclosed at page 27, and presented as item number 1. One of the substeps, for

example, describes a pair of buttons on the pen tray of the electronic whiteboard which, when pushed simultaneously for one second, displays the "Pick the Orientation Precision dialog box" (also called the "Pick the Orientation Level dialog box") on the computer screen. Thus, step 1 in one of three possibilities, can indeed happen distant the computer, as it can be buttons at the whiteboard. But this step is not initiating the calibration sequence of the SMART board. There are more steps that need to occur, before the calibration image is displayed on the whiteboard.

One could equate this 1<sup>st</sup> step of the SMART manual with, for example, turning on the system one the user enters the room. Of course one turns the power on the several devices of the SMART system, and turning on the power to everything but the computer will likely occur "distant the computer", but this could not be equated with "initiating the calibration process". Simply turning the power on does not initiate the calibration process.

Similarly, at the 1<sup>st</sup> step of the SMART manual's disclosure at pages 27-28, the calibration process *has not* begun. The user can push buttons at the SMART board, which only signals the SMART system to provide the user with several options of orientation levels, the choice of the levels being made, and must be made, at the computer.

Completing step 1 of the SMART orientation means the user has three more steps to complete, which are executed *at the computer* and which require further interaction by the user, before the calibration image is projected onto the SMART whiteboard.

As the SMART manual discloses, the second step is - "2. Preview the three orientation levels - Quick, Standard and Fine - by *clicking* on the circle next to each heading." This step of previewing the type of orientation occurs at the computer.

"3. Once you have determined the orientation level you prefer, select it by *clicking* in the appropriate circle." Again, this step of selecting the type of orientation occurs at the computer.

"4. *Click* the Next button." This step of clicking the Next button again occurs at the computer.

Only after clicking the Next button at the computer is the SMART system calibration process initiated, as "[a] large gray rectangular image will almost entirely fill the SMART Board screen. This screen will contain the number of crosses associated with the orientation level chosen." It is apparent that only after this step 4, the calibration has been initiated (as indicated by the large grey rectangular image with crosses), but not before.

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Step 4 of the SMART system, which initiates the calibration process (as the calibration image is thereafter projected on the whiteboard), occurs at the computer. Thus, the SMART manual cannot anticipate a claim that recites that this step of initiation of calibration occurs distant the computer. The SMART manual, if anything, teaches away from the presently claimed invention, as teaching only that the initiating of calibration begins at the computer.

Since calibration is not "initiated" until step 4, none of the steps prior to step 4 have begun the calibration process, and there is no teaching, and no way, of performing steps 2-4 anywhere but at the computer. Prior to step 4, the SMART board's software can not track the projected image and is not calibrated, so touching the board would not transmit the correct mouse coordinate of the projected image.

*Steps 2 through 4 require clicking the mouse on the computer.* Therefore, the cited reference clearly only discloses the calibration initiated at the computer in step 4. (Notice that steps 2 through 4 describe clicking, whereas step 5 uses the words "pressing your finger squarely on the screen", a clear indication that the user must return to the computer for steps 2 through 4 before the calibration process is started.)

The recited Claims are novel and non-obvious over the cited reference, as the step of initiating calibration (equivalent to pressing the Next button at the computer for the SMART system), is distant the computer.

Claim 41 is novel and non-obvious over the cited reference. It expressly defines the calibration process as "projecting an image onto the whiteboard, detecting a touch at a point on the whiteboard corresponding to the projected image, and calculating a relationship between the touched point on the whiteboard corresponding to the projected image and a position on the display device." The Claim recites that the initiation of the calibration process, that is, the initiation of the step of projecting an image onto the whiteboard, occurs *distant the computer*.

The cited reference discloses that the initiating of the calibration process, that is, step 4 "[a] large gray rectangular image [is projected and] will almost entirely fill the SMART Board screen. This screen will contain the number of crosses associated with the orientation level chosen" occurs *at the computer*, after pressing the Next button.

Claim 46 is novel and non-obvious over the cited reference. It recites that the step of initiating is only a single, one-step process, and that immediately thereafter, the step of projecting

the calibration image on the whiteboard takes place. The cited reference discloses a five-step initiation of calibration process (which it does not, it discloses a five-step orientation process, wherein the single, 4<sup>th</sup> step of which is the step of initiating calibration, and this 4<sup>th</sup> step occurs at the computer), and thus Claim 46 is distinguishable from such a reading.

Basis for the limitations of Claim 46 can be found in the *Specification* as filed, Page 2, Lines 23-29.

Claim 50 is similarly novel and non-obvious over the cited reference.

The dependent Claims are novel and non-obvious over the cited reference as being dependent from allowable independent Claims. Specifically, for example, Claims 45, 49 and 53 recite that the step of initiating/signaling comprises pushing a button of a remote control device. This Claim limitation is found in the *Specification* as originally filed, Page 6, Line 13. This limitation is not found in the cited reference.

#### 4. Fees

This *Response and Amendment* is being filed within six months of the *Office Action*, and more specifically within five months. Thus, a two-month extension of time fee is believed due.

No additional Claims fees are believed due, as the total number of Claims, and independent Claims, is less than that paid upon original filing and prosecution.

Authorization to charge deposit account No. 20-1507 is given herein for all fees due.

**CONCLUSION**

By the present *Response and Amendment*, the Application has been in placed in full condition for allowance. Accordingly, Applicants respectfully request early and favorable action. Should the Examiner have any further questions or reservations, the Examiner is invited to telephone the undersigned Attorney at 404.885.2773.

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